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The Swedish Patent Office
PCT International Application

AMENDED CLAIMS

1. A method of manufacturing the stator for a rotating electric machine, characterized in that a high-voltage cable is drawn
5 through slots in the stator to form the stator windings, the cable having an insulation system comprising at least outer and inner semiconducting layers and solid insulation, and in that spring members are deactivated and arranged in at least one slot, and that said spring members are activated after the cables have been wound.
- 10 2. A method as claimed in claim 1, in which a first spring member is arranged to be supported by one of the slot walls, that a first support body is arranged between the spring member and at least one cable lead-through, preferably two cable lead-throughs, said first support body being
15 arranged to be able to be pressed against at least one cable lead-through.
3. A method as claimed in claim 2, wherein a second spring member is arranged to be supported by the opposite slot wall and immediately opposite said first spring member, that a second support body
20 is arranged between said second spring member and said at least one cable lead-through, said second support body being arranged to be able to be pressed against said at least one cable lead-through.
4. A method as claimed in claim 2, wherein a pressure member is
25 arranged between said first support body and the opposite slot wall so that the pressure member, via said first support body, presses against said first spring member.
5. A method as claimed in claim 3, wherein a pressure member is
30 arranged between said first and second support bodies so that the pressure member, via these, presses against said first and second spring members.
6. A method as claimed in claim 4 or claim 5, wherein said
35 pressure members are arranged so that said spring members are

deactivated and that the spring members are activated by removal of the pressure member.

7. A method as claimed in any of claims 1-6, wherein the spring
5 member comprises a corrugated, preferably laminated, plate spring.

8. A method as claimed in claim 7, wherein said deactivation
entails gluing the plate spring to a flat surface so that it acquires a flat
shape and that said activation entails releasing the glue joint.

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9. A method as claimed in claim 8, dependent on claim 1, wherein
the plate spring is glued to the inside of a slot lid fitted at the radially
inwardly directed opening of the slot.

10. A method as claimed in claim 8 or claim 9, wherein the glue
15 joint is released by heating, preferably by the transfer of heat generated in
the cable.

11. A method as claimed in claim 9, wherein the glue joint is
20 released by knocking against the outside of the lid.

12. A method as claimed in any of claims 1-11, wherein said spring
members extend along substantially the entire axial extension of the
stator.

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13. A rotating electric machine comprising a stator with windings (6)
drawn through slots (5) in the stator (1), characterized in that
at least one winding (6) is a high-voltage cable with an insulation system
comprising at least two semiconducting layers (32, 34), each layer
30 essentially constituting an equipotential surface, and also including solid
insulation (33), and in that at least one spring member in the form of a
corrugated, preferably laminated plate spring (13c, 13d) is arranged to
exert pressure on at least one cable lead-through.

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14. A machine as claimed in claim 13, wherein at least one of said layers (32, 34) has substantially the same coefficient of thermal expansion as the solid insulation (33).
- 5 15. A rotating electric machine as claimed in claim 13 or claim 14, wherein said spring member (13c) is arranged between one slot wall (12c) and a support member (14c) which is held pressed by the spring member (13c) against at least one, preferably two cable lead-throughs (6).
- 10 16. A rotating electric machine as claimed in claim 13 or claim 14, wherein said spring member (13d) is arranged between a slot lid (17) fitted on an inwardly directed opening of the slot and the radially innermost cable lead-through (6).
- 15 17. A rotating electric machine as claimed in any of claims 14-16, wherein said spring members (13c, 13d) extend along substantially the whole axial extension of the stator (1).
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